



Wireline Pressure Control Equipment

Wireline Pressure Control Gear



- Special equipment designed for Wireline operators to safely deploy tools into the well while maintaining well integrity

■ Pressure Control Equipment Components

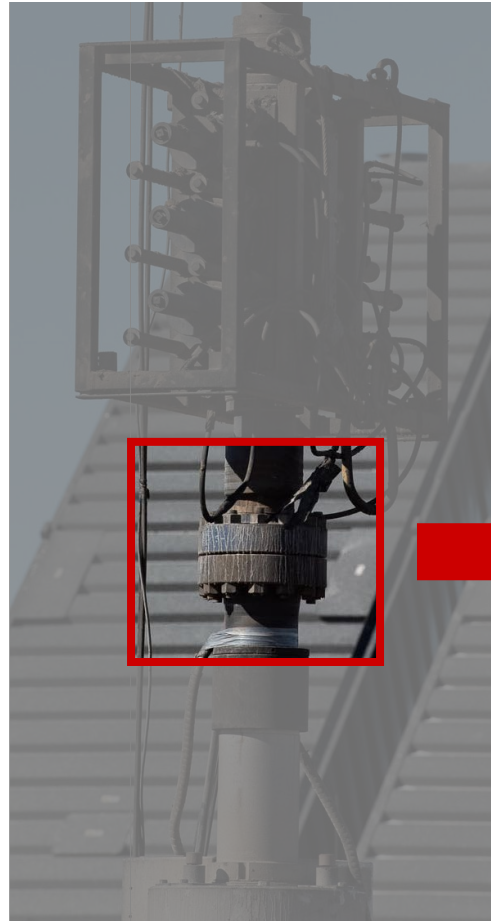
- Well head connection
- Wireline Valve
- Pump in Sub
- Lubricator
- Tool Trap
- Grease head / Pack off



Wellhead Connection



- Two options to secure pressure control equipment to the wellhead
 - Flange
 - Has a compatible threaded union to build the rest of the pressure control equipment on
 - Remote, hands free quick connect system



Wireline Valve



- 1-4 Hydraulically actuated rams
- Rams contain high durometer rubber sealing element
 - This seals around wireline cable
 - Isolates pressure from wellbore
- Allows for contingency work on equipment above wireline valve



Pump In Sub



- Standard side port
- Port is utilized for
 - Fluid injection
 - Bleed off



Tool Trap



- Traps tool in unlikely event where tool string is separated from the wireline
- Prevents tools from going down hole
- Hydraulically actuated flapper
 - Flapper has a groove large enough for wireline to pass through



Lubricator



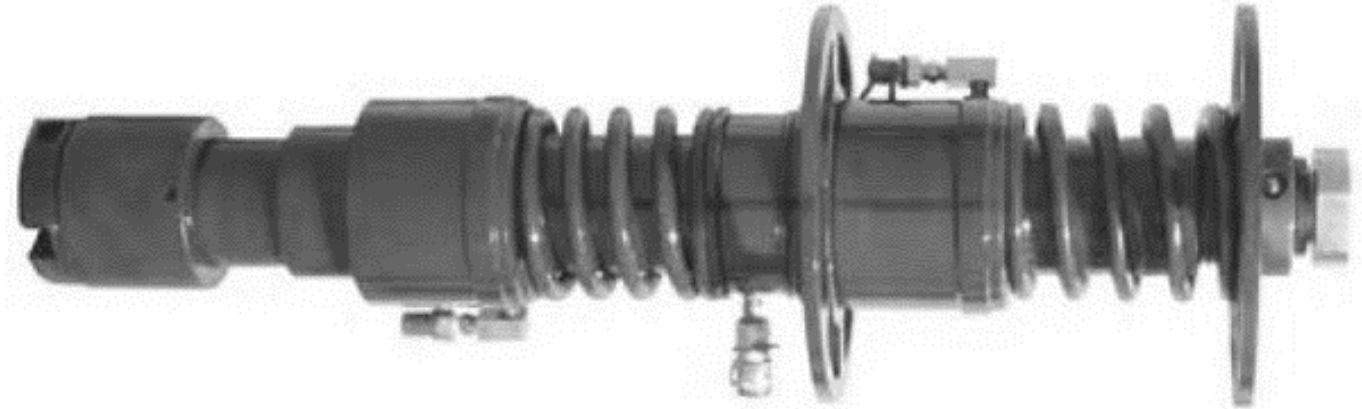
- Threaded tube
- Assembled in sections long enough to cover wireline toolstring



Pressure Control Head



- Two types of pressure control heads
 - Conventional wireline requires a grease head
 - Greaseless wireline requires a pack off
- Pressure control heads seal around wireline to maintain well integrity
- Allows wireline to travel in and out of the well



Greaseless Wireline Pack Off Pressure Control Head